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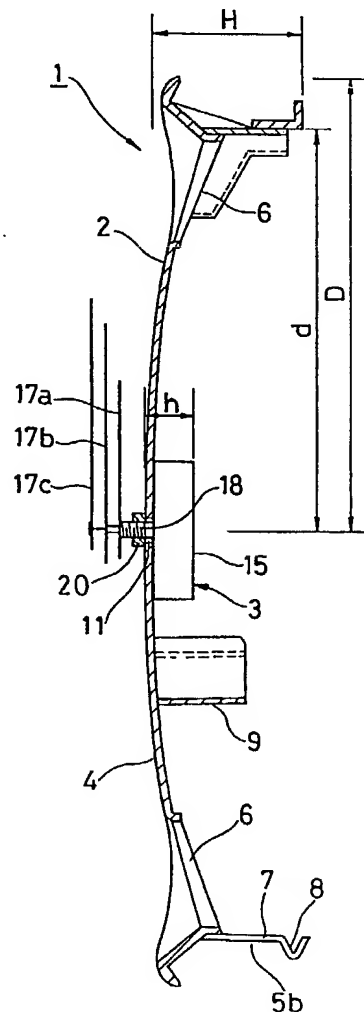
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(57) A wheel cover 2 for a road wheel of a vehicle has installed at the back thereof a clock actuating unit 15 of a clock kit 3 within the region surrounded by the wheel cover mounting means 5b, (5a, 5c, Fig. 2). Time-indicating needles 17a, 17b, 17c are provided on an ornamental face 4.

FIG.3



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FIG. 1

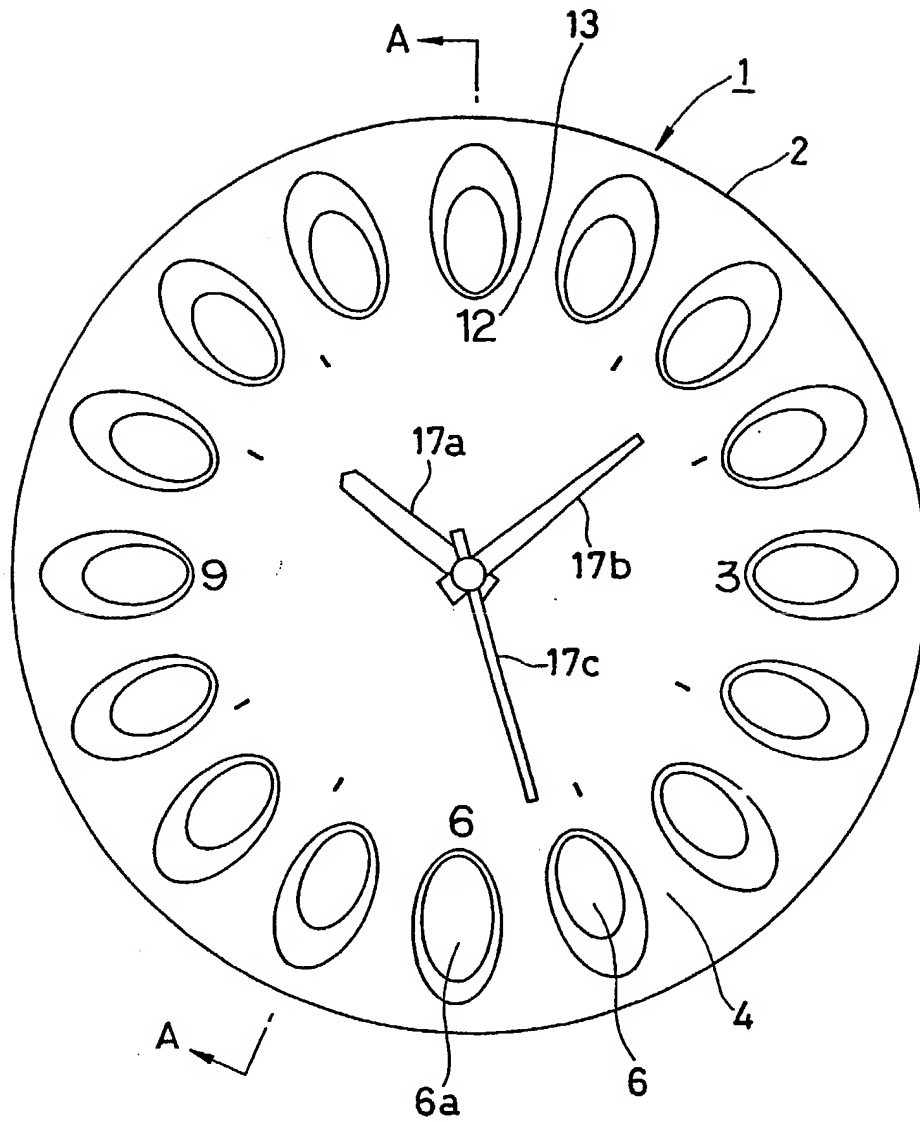


FIG. 2

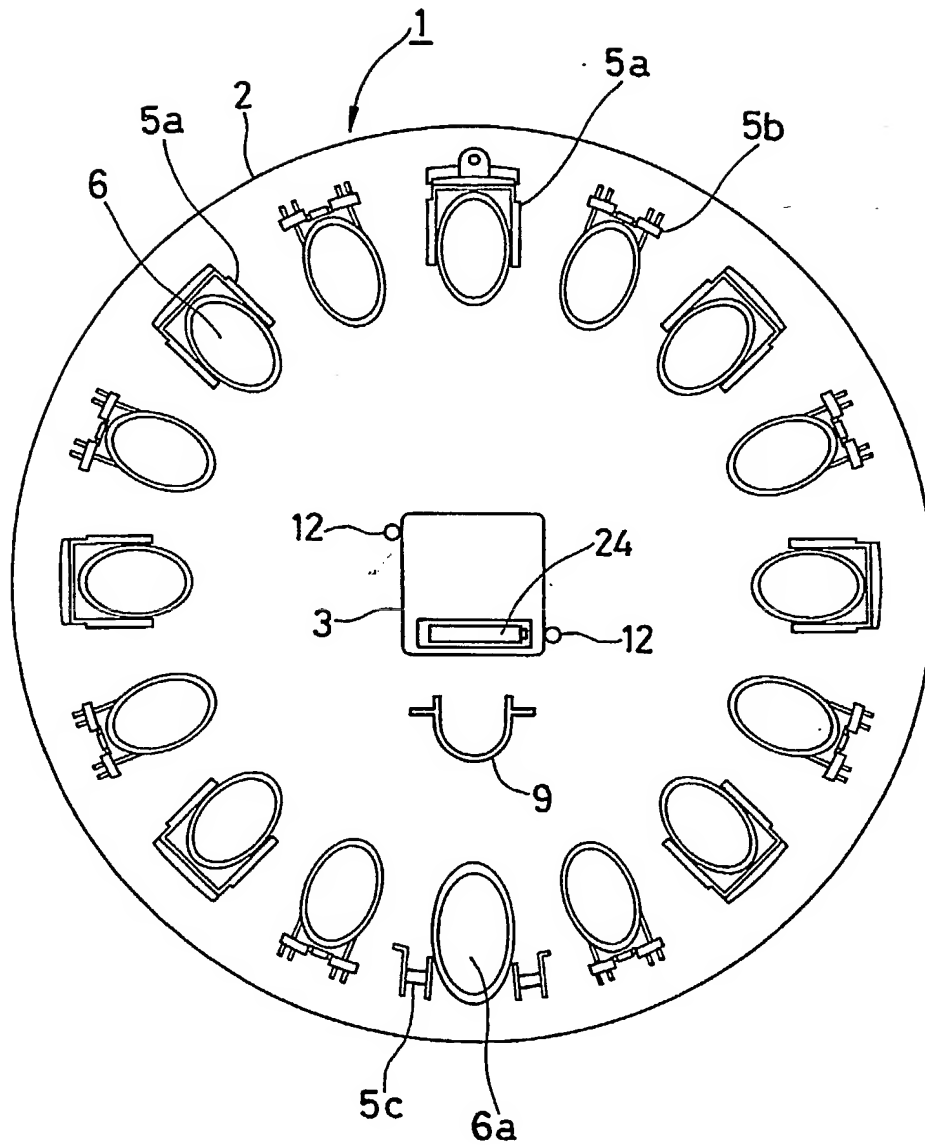
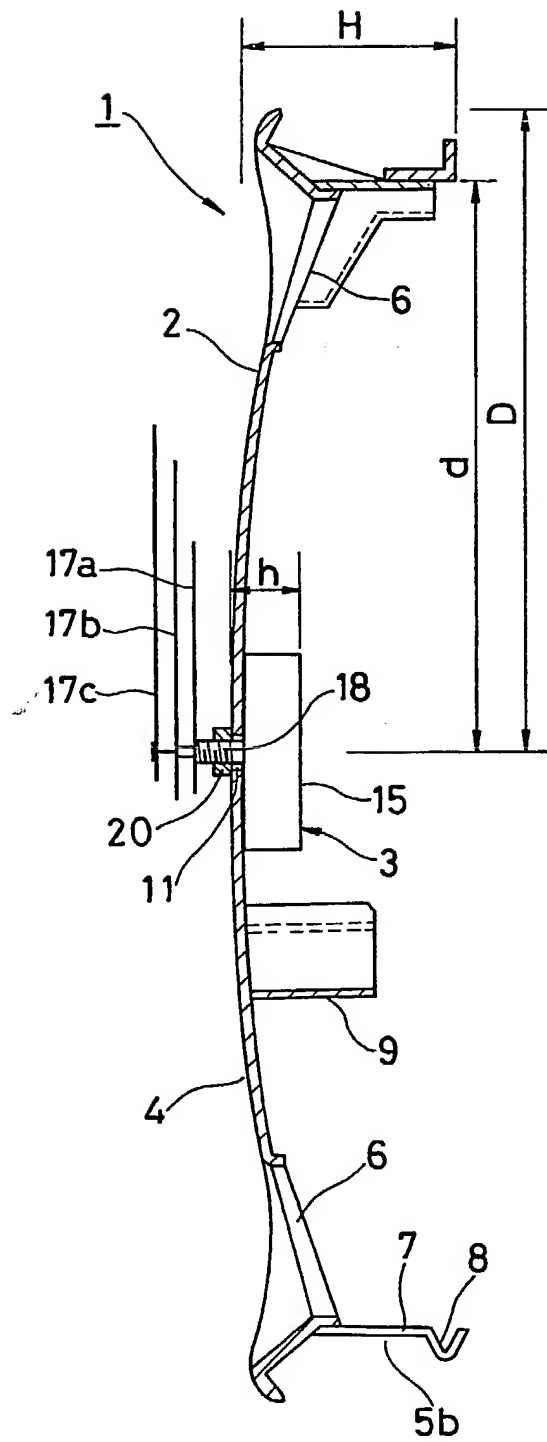


FIG.3



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FIG. 4

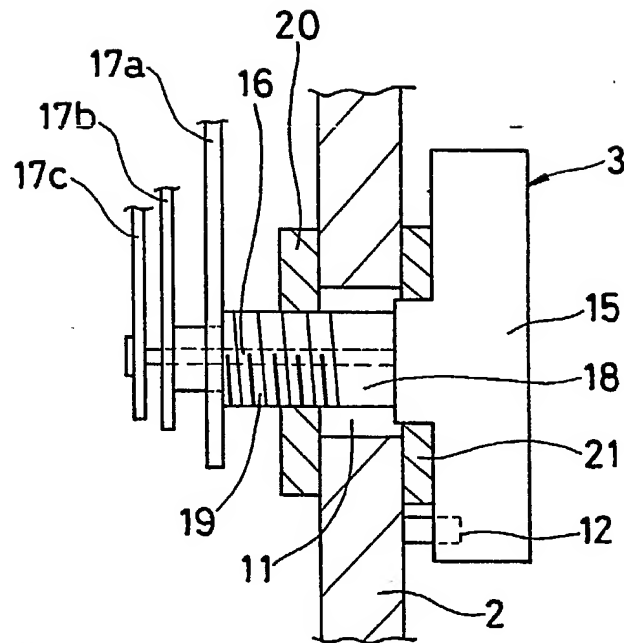
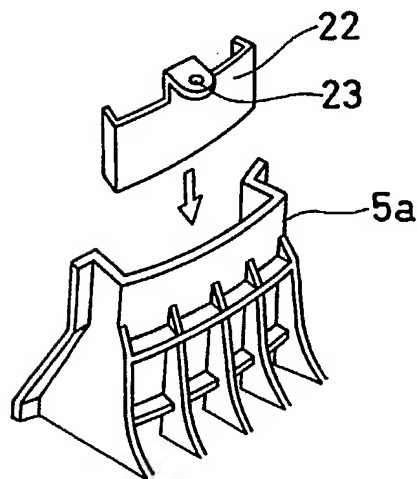


FIG. 5



ORNAMENTAL ARTICLE

The present invention relates to an ornamental article made under utilization of a wheel cover for road wheel of a vehicle.

Road wheels of vehicles, such as motor cars and the like, are equipped each with a wheel cover for protecting the road wheel and for providing ornamental attractive appearance. The wheel cover is mounted on the wheel so as to cover the outer face of the wheel, in order to serve for protecting the wheel accessories, such as, wheel fixing nuts, air charge inlet valve etc., and for increasing the ornamental performance of a car.

While wheel covers provide, thus, owing to the purpose also for the ornamental effect, not only an increase in the ornamental performance even in the state assembled on the vehicle, but also a high ornamental performance when seen as a single article.

However, such a wheel cover has, since it is bound by the premise of being mounted on a road wheel, mounting means for mounting on the wheel, which are exposed out of the wheel cover and are problematic for using the wheel cover as such for an independent ornament, as a marine steering wheel does.

While, in the field of clocks, there has been known one in which a decorative dinner dish is utilized for the clock dial board. In such a clock, there is a problem that a separately prepared casing should be attached to the rear face for accomodating the clock

actuating unit, since such actuating unit obstructs not only the facility for the installation as, for example, a wall-hanging clock but also the ornamental appearance of the clock by projecting out on the rear face.

The essential object of the present invention is to provide an ornamental article, which exhibits, as a whole, a superior ornamental effect and functional performance, by combining a wheel cover for a vehicle with a clock kit to increase the ornamental feature and at the same time to increase the facility for the installation by utilizing the mounting means for mounting the wheel cover on the wheel as a space for accomodating the clock actuating unit of the clock kit.

The present invention relates to an ornamental article, which comprises a disk-like wheel cover of road wheel of a vehicle, said wheel cover having an ornamental outer face and a mounting means for mounting on the road wheel disposed projectingly on the rear side along the circumference thereof; a through hole provided at the center of the wheel cover; a clock actuating unit accomodated inside said mounting means on the side of the rear face of the wheel cover under fixation to the wheel cover at the position of said through hole; a clock shaft extending from the clock actuating unit to the side of said through hole; and time-indicating clock needles put on the clock shaft.

The ornamental article according to the present invention is made under the utilization of a wheel cover for a vehicle as such, by fixing the clock actuating unit on the inner side thereof using the

through hole provided at the center of the wheel cover and, then, putting the time-indicating needles on the clock shaft on the side of the outer face.

The ornamental article according to the present invention can serve for a wall-hanging ornament by providing it with an installation means or, further, for an on-desk ornament by resting on a stand. In any case, due to the installation of the clock actuating unit inside the mounting means, the ornamental article according to the present invention is superior in the facility for the installation and in the appearance, without relying on a separate arrangement of a casing for the clock actuating unit.

The ornamental article according to the present invention is superior in the over-all ornamental effect and in the facilitation for installation, by making use of the intrinsic high ornamental effect of the wheel cover with an additional ornamental effect by the clock unit and, in addition, since the clock actuating unit is accommodated in the mounting furniture.

The present invention is embodied in the appended Figs. 1 to 5.

Fig. 1 is a front view showing the ornamental article of Example.

Fig. 2 is a rear elevation thereof.

Fig. 3 is a section A-A of Fig. 1.

Fig. 4 is a partial enlargement of essential portion thereof.

Fig. 5 is a decomposed perspective view showing the fixing state of the hanging latch.

Below, Example of the present invention is described by the appended Drawings.

In the Drawings, numeral 1 is an ornamental article which is composed of a plastic injection molded wheel cover 2 for a vehicle wheel and a clock kit 3. For the wheel cover 2, one constructed so as to permit to be mounted for covering the outer face of the wheel is utilized essentially as such. As the clock kit 3, every commercial one of electronic, electromotive or mechanical type can be employed as such.

The wheel cover 2 is formed by injection molding in a shape of disc for covering the outside face of the wheel and is provided with an ornamental outer face 4 by painting in desired color and projecting legs 5a, 5b and 5c for mounting on the wheel along the circumferencial rim on the rear face side. In this Example, the rim or radially outer peripheral portion of the wheel cover 2 is formed as a flange, along which air vent holes 6 are arranged circumferentially, though some other wheel covers may not be provided with such vent holes.

The mounting leg 5a has an arcuate projecting member adapted to establish an engagement with a circular inner surface of the road wheel by inserting therein so as to prohibit radial movement of the wheel cover 2. The mounting leg 5b has an axially inwardly projecting engagement member 7 adapted to establish an engagement with a corresponding groove of wheel rim arranged on the inner surface of the circular groove of road wheel so as to engage with the ring-formed groove

under insertion of a reinforcement steel ring spring (not shown) in the recess 8 formed on the radially inner side of the engagement member 7 to prevent dropping out of the wheel cover 2 to the direction vertical to the face.

While the mounting legs 5a and 5b are disposed alternately at the periphery of the vent holes 6 in this Example, there is a case where mounting legs of only one kind constructed so as to possess either functions of these mounting legs are disposed at the periphery of the vent holes in other wheel covers. A detailed explanation of the function of mounting of the wheel cover on the road wheel is omitted, since it is not important for the ornamental article of the present invention.

The air vent hole 6a at the lowermost position shown in Figs. 1 and 2 is larger than other ones, in order to permit to accept therein the air charge nozzle and, for this reason, the mounting leg 5c at this vent hole 6a is correspondingly deformed, of which explanation is not important for the ornamental article and is also omitted.

9 is a wheel nut engagement member for engaging with a wheel fixing nut for fixing the road wheel for preventing rotation of the wheel cover when it is mounted on the road wheel, of which explanation is also omitted, as not important for the ornamental article.

At the center of the wheel cover 2, a through hole 11 is formed. If there is no such a through hole

11 on the wheel cover to be mounted on a vehicle, it is formed for the ornamental article 1. 12 represents positioning stoppers for positioning the clock kit 3, which are also formed for the ornamental article 1 when not present on the wheel cover 2 to be mounted on a vehicle. 13 denotes a time scale imparting a function as a dial board to the outer ornamental face 4, which is not necessarily formed by numeral symbols but may eventually be dispensed with, when the time scale can easily be indicated by the air vent holes 6.

The clock kit 3 comprises a clock actuating unit 15 accommodated inside the mounting legs 5a, 5b and 5c of the wheel cover 2; a clock shaft 16 extending from the clock actuating unit 15 into the through hole 11; time indication needles composed of an hour-indication needle 17a, a minute-indication needle 17b and a second-indication needle 17c to be put on the clock shaft 16; a sheath 18 to be inserted in the through hole 11 for covering the clock shaft 16; a fixing nut 20 to be screwed on the screw thread 19 formed on the outer face of the sheath 18; and a packing means 21 between the wheel cover 2 and the clock actuating unit 15.

22 is a hanging latch to be insertedly attached to the mounting leg 5a disposed at an upper portion of the wheel cover 2 and having a hole 23 for serve for hanging. 24 is an electric battery accommodated in the clock actuating unit 15.

In the above arrangement, the distance H between the bottom of the wheel cover 2 and the ends of

the mounting legs 5a and 5b is greater than the distance h between the bottom of the wheel cover 2 and the end of the clock actuating unit 15 ($H \geq h$). The radius D of the wheel cover 2 is greater than the distance d between the center of the the wheel cover 2 and the periphery thereof ($D > d$).

The ornament article constructed as above is prepared by making use of a wheel cover 2 for a vehicle as such by fixing a clock actuating unit thereonon, wherein the through hole 11 is formed, when there is not such a through hole 11 in the wheel cover 2, during or after the injection molding of the wheel cover 2. If the positioning stoppers 12 are not present, they are formed upon the injection molding of the wheel cover 2 by, for example, retracting the pins from a mold face.

The ornamental article 1 is prepared by placing the clock actuating unit 15 within the mounting legs 5a, 5b, 5c of the wheel cover 2 with interposition of the cushion sheets 21, inserting the sheath 18 in the through hole 11 and attaching thereto the fixing nut 20 by screwing on the screw thread 19 from the side of the ornamental face 4 to fix it. Here, the positioning is effected by abutting the clock actuating unit 15 to the positioning stoppers 12. Then, the time indicating needles 17a, 17b and 17c are put on the clock shaft to finish the ornamental article 1.

The ornamental article 1 according to the present invention prepared as above can be settled by fixing the installation attachment 22 on the mounting

legs 5a and hooking the hole 23 on, for example, a hanging dog disposed on a wall or so on, in order to use as a wall-hanging ornament. Alternatively, it can be used as an on-desk ornament by resting it on a resting stand.

In either of the above cases, it is not obstructed by any projecting part, and is superior in the facility for the installation without debasing the appearance, since the clock actuating unit 15 is accommodated within the mounting legs 5a, 5b and 5c.

Due to the combination of the intrinsic superior ornamental effect of the wheel cover 2 with the ornamental effect of the clock kit 3 and, since the clock actuating unit 15 is not exposed, the ornamental article 1 reveals a superior over-all ornamental effect and functional facility.

While in this Example, the ornamental article 1 is made in the condition in which, as the ornamental article 1 of the wheel cover 2, unnecessary parts, such as the engagement member 9, are held remained, it is possible to prepare wheel covers 2 in which these are omitted in the molding of the wheel cover 2.

As the clock kit 3, while electronic one with quartz oscillator may be preferable, every other clock of, for example, an electromotive or mechanical type can be employed. While in the above Example, the sheath 18 is fixed to the clock actuating unit 15, it may be fixed to the fixing nut 20. As for the clock shaft 16, it is also possible that the clock shaft does not extend into the through hole 11.

Other types of wheel covers may likewise be employed, for example, those which are not be provided with air vent holes 6 and those having other mounting means.

In accordance with the present invention, it is made possible to obtain an ornamental article having a superior over-all ornamental effect and functional facility, by combining a wheel cover for a vehicle with a clock kit to increase the ornamental effect by addition of their intrinsic ornamental features and, in addition, an increased facility for the installation is attained with an increase appaerance, by making use of the mounting means for mounting the wheel cover on the wheel as the space for accomodating the clock actuating unit.

CLAIM

An ornamental article, comprising

a disk-like wheel cover for a road wheel of a vehicle, said wheel cover having an ornamental face formed on the outer face side and a mounting means for mounting on the road wheel disposed projectingly on the rear face side along the circumference thereof,

a through hole provided at the center of the wheel cover,

a clock actuating unit accomodated inside said mounting means on the rear face side of the wheel cover and fixed to the wheel cover at the position of said through hole,

a clock shaft extending from said clock actuating unit to the side of said through hole, and

time-indicating needles mounted on the clock shaft.

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Search Examiner

C J DUFF

Databases (see over)

(i) UK Patent Office

(ii) ONLINE DATABASES: WPI, CLAIMS

Date of Search

10 MARCH 1993

Documents considered relevant following a search in respect of claims 1

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
A	GB 2242873 A (FENG)	1
A	GB 1591315 (JAHRESUHREN)	1
A	GB 343816 (BOLANZ)	1

Category	Identity of document and relevant passages	Relevant to claim(s)

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